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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/696,066

Applicant(s)

BENCO ET AL.

Examiner

CHARLES SHEDRICK

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 5/28/08 have been fully considered but they are not persuasive.

Applicant argues that the primary reference of the Office Action to Pepper is directed to a system and method for automatically screening and directing incoming calls that does not include screening calls based on a current cost of message units. It is respectfully submitted that the secondary references do not cure this deficiency of Pepper. Hartmaier allegedly discusses a prepaid subscriber account system for use with a wireless telephone system. The system monitors a subscriber's call, deducts the cost of the call from the subscriber's prepaid account in real time, warns the subscriber during a call when the account is near depletion and terminates the call when the account is depleted. The system can also prevent the initiation of a new call when the account is depleted (Abstract).

Contrary to the assertions of the Office Action, Hartmaier does not disclose or suggest screening calls based on a current cost of message units. Paragraph 72, cited by the Office Action, indicates that if the call monitoring module determines that the subscriber does not have a sufficient account balance (or, in the words of the Abstract, if the account is depleted) to accept the incoming call, the call monitoring module can respond to the FAVAIL command with an actcode parameter that indicates 'block the call'.

However, The Examiner respectfully disagree.

The Applicant repeats the same rationale as a basis for determining that the prior art does not teach screen calls based on the current cost of messaging. It is clear that call screening at the

most basic level is evaluating the characteristics of a telephone call before the conversation. It the instant case, the characteristic happens to be based on the current cost. Therefore, even based on the Applicants interpretation that *" Paragraph 72, cited by the Office Action, indicates that if the call monitoring module determines that the subscriber does not have a sufficient account balance (or, in the words of the Abstract, if the account is depleted) to accept the incoming call, the call monitoring module can respond to the FAVAIL command with an actcode parameter that indicates 'block the call'"* the prior art would read on call screening. The prior art clearly teaches that prior to the conversion the account balance is evaluated (i.e., a characteristic) based on the numbers associated with the account, if the account balance is sufficient the call goes through if the account balance is insufficient the call is blocked. Clearly the prior art denies or approves (i.e., screening) the incoming call based on the current cost (i.e., is the account balance sufficient).

2. Applicant argues that Hartmaier does not consider the current cost of air time or a current air time ration state before completing or connecting the call in order to determine whether or not the call should be completed or connected to the calling party, sent to voice mail or processed in some other way. It is respectfully submitted that the prevention of call initiation of Hartmaier is based on whether or not the called party's account has any money or other credit in it (or, in the words of the Abstract, if the account is depleted), and not on the current cost of air time or a current air time ration state. Hartmaier does not disclose or suggest that the sufficiency of account balance test is based on a current cost of air time. It is respectfully submitted that any reading of Hartmaier as suggesting use of a current cost of air time in an incoming call screening

process is based on impermissible hindsight after reading and understanding the present Application.

However, the Examiner respectfully disagree. The Applicants assertion that the account balance has nothing to do with current cost would contradict any reasoning whatsoever to even consider the account balance. Clearly the prior art makes a determination of what is sufficient. In other words the account balance must be able to handle the proposed cost of a call. Furthermore, paragraphs 0079 and 0080 indicate that the call monitoring module can contain easily maintained rating engines which determine the access fee (either by month, week or day), the per minute charges for air time usage, toll charges, and the definition of the "local calling area." The local calling area may be defined by area code, area code+local exchange, or mileage from the home area. All rating can be real-time based on MSC triggers and pre-defined rating tables. The call monitoring module's ability to handle different rate tables is limited only by the serving MSC's ability to identify the current location of the subscriber and the dialed digits. Each subscriber has a class of service that indexes the rate tables, and these tables can be used in many ways to customize the charging profile for each subscriber. The same rating tables can be used when originating or terminating a call. The call monitoring module can be instructed not to charge for incoming calls that last less than a predetermined time or for calls from specified numbers. Tolls for call origination to numbers like voicemail or customer service can be configured as toll-free.

3. In response to applicant's argument that the examiner's conclusion of obviousness is based upon *improper hindsight reasoning*, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so

long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

4. Applicant argues that Wise does not disclose or suggest screening calls or screening calls on the basis of a current cost of message units.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

5. Applicant argues that Hanson does not disclose or suggest managing or rationing air time. If a sufficient balance is available, Hanson places or receives a call. Hanson does not consider a priority of a caller or a current cost of air time. Any interpretation of Hanson as considering a current cost of air time or a current air time ration state is based on impermissible hindsight reasoning

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so

long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

6. Applicant argues that Chow does not disclose or suggest screening a call or making screening decisions based on a current cost of message units.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

7. Applicant argues that Paragraph 72 of Hartmaier indicates that a call monitoring module determines whether or not a subscriber has a sufficient account balance to accept an incoming call. Hartmaier does not disclose or suggest that this determination is based on a current cost of message units. Paragraphs 79-82 discuss variations in per-minute charges for airtime usage, toll charges and the definition of the "local calling area." However, there is no suggestion that this information is used in the screening of calls. Even if Hartmaier discloses a system that monitors calls, deducts the cost of the calls from a subscriber's account in real time, warns when the account is near depletion, terminates the call when the account is depleted and **prevents call initiation when the account is depleted, Hartmaier does not disclose or suggest considering a current cost of air time before connecting or completing a call in order to determine whether the call should be completed to the called party, sent to voice mail or processed in**

some other way. These processes of Hartmaier (paragraphs 79-82), other than the depleted account test (paragraph 72), occur after a call has been connected.

However, the Examiner respectfully disagree. Again the Applicant has repeated arguments made in the previous sections of the remarks based on the same rationale. The Examiner is unable to find any other reasoning as to what basis the Applicant is arguing that preventing calls based on an insufficient balance would be any different that the manner in which the claims states that the call is being screened based on the current cost. One of ordinary skill in the art would recognize that if a call comes in and there's a charge associated with that particular call (i.e., current cost based on the system) and the account balance is sufficient/insufficient (i.e., since there is a cost associated with the call at the time the call reaches the system) then the call is approved/denied (i.e., screening). In other words why would the system even address the account balance ? what would be the basis of determining a sufficient account balance ?

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

8. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching,

suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In response to applicant's argument that the prior art does not teach for the purpose of screening calls, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

9. The Examiner further incorporates the reasoning above in response to the Applicants remaining arguments since the Applicant essentially repeats arguments based on the same rationale throughout the remarks. The Examiner further maintains that rejection is proper based on the response and the outstanding rejection.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-9, and 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5930700 to David J. Pepper (Pepper) et al. in view of U.S. Publication No. 2002/0111153 A1 to Hartmaier et al. (Hartmaier)

Regarding claim 1, Pepper discloses a method for managing message units, the method comprising (col.2 lines 62-67, managing incoming communication): receiving a list of potential calling parties associated with a subscriber (col. 3 lines 48-51), the list including identification information regarding the listed potential calling parties (col. 3 lines 4-6, col. 3 lines 31-41); associating a priority level to each of the listed potential calling parties (col.3 lines 1-3, col. 3 lines 18-30 and col. 3 lines 44-47); and, screening calls based on at least one of a calling line identification (ANI) and a personal identification code associated with the calls and based on information included in the list of potential calling parties, on the associated priorities (abstract, figures 1,3 and 4,col.1 line 50-co1.2 line 60, col. 3 lines 6-9, col. 3 lines 12-63, col. 5 line 1- col. 6 line 11).

However, Pepper fails to disclose screening calls based on a current cost of message units.

In a similar field of endeavor, Hartmaier discloses screening calls based on a current cost of message units (pars. 72 and 79-82).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Pepper, and have calls screened based on a current cost of message units as disclosed by Hartmaier for the purpose of minimizing call cost.

Regarding claim 2, the combination of Pepper and Hartmaier discloses the method of claim 1 wherein screening calls comprises: determining that the calling party is not a listed potential caller; and assigning a low priority to the calling party (Pepper, col. 3 lines 18-30).

Regarding claim 3, the combination of Pepper and Hartmaier discloses the method of claim 1 wherein screening calls comprises: determining that the calling party is a listed potential caller; and assigning the priority associated with the listed potential caller to the calling party (Pepper, see figs. 8 and 9, col. 3 lines 18-30 and col. 9 lines 12-30).

Regarding claims 4 and 5, the combination of Pepper and Hartmaier discloses the method of claim 1 wherein screening calls comprises: determining a calling line identification (ANI) associated with the calling party; comparing the calling line identification (ANI) with the identification information of the listed potential calling parties; finding a calling line identification (ANI) in the list of potential calling parties that matches the calling line identification (ANI) associated with the calling party; and assigning a priority level associated with the calling line identification found in the list of potential calling parties to the calling party (Pepper, see figures 12A and 12B, col. 3 lines 18-47, col. 6 lines 12-29, col. 10 lines 47-59, and col. 11 line 51- col. 12 line 20).

Regarding claim 6-9, Pepper discloses the method of claim 1 wherein screening calls comprises: completing the requested call to a mobile device of the subscriber if the priority level of the calling party is high (Pepper, col. 3 lines 24-26 and col. 9 lines 26- 30).

However, Pepper fails to disclose wherein screening calls comprises: completing the requested call to a mobile device of the subscriber if the current ration state is unrestricted, requesting billing information regarding the subscriber from a billing system; wherein requesting billing information regarding the subscriber from a billing system comprises: requesting information regarding unused allocated air time from an allotment of air time in an air time allocation period associated with the subscriber; wherein requesting billing information regarding the subscriber from a billing system comprises: requesting information regarding a current cost to the subscriber of air time.

In a similar field of invention, Hartmaier discloses disclose wherein screening calls comprises: completing the requested call to a mobile device of the subscriber if the current ration state is unrestricted (par. 71), requesting billing information regarding the subscriber from a billing system; wherein requesting billing information regarding the subscriber from a billing system comprises: requesting information regarding unused allocated air time from an allotment of air time in an air time allocation period associated with the subscriber(see figure 6 steps 602-604, and par. 71); wherein requesting billing information regarding the subscriber from a billing system comprises: requesting information regarding a current cost to the subscriber of air time (pars. 79-82).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Pepper by screening calls comprising completing the

requested call to a mobile device of the subscriber if the current ration state is unrestricted as disclosed by Hartmaier for the purpose of limiting usage and incurred charges.

Regarding claim 25, Pepper discloses a system operative to conserve message units for a subscriber, the system comprising: a potential caller list manager operative to receive and maintain a list of potential callers in association with priority levels of the callers, the list being associated with the subscriber; a message unit conserver operative to determine a priority of a calling party based on the list of potential callers and a call processor operative to process a call request of the calling party based on the determined priority of the calling party (abstract, figures 1,3 and 4,col.1 line 50-co.1.2 line 60, col. 3 lines 6-9, col. 3 lines 12-63, col. 5 line 1- col. 6 line 11).

However, Pepper fails to disclose a system operative to conserve message units for a subscriber comprising to determine a current message unit ration state based on a current cost of message units to the subscriber; and a call processor operative to process a call request of the calling party based the determined current message unit ration state.

Hartmaier discloses a system operative to conserve message units for a subscriber comprising to determine a current message unit ration state based on a current cost of message units to the subscriber, and operative to process call request based on determined current message unit ration state (pars. 72 and 79-82).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Pepper with the teachings Hartmaier for the purpose of proper management and eliminating undesired cost.

Regarding claims 26-29, the combination of Pepper, and Hartmaier discloses the

system of claim 25 wherein the message unit conserver is operative to determine the current message unit ration state based on a current opportunity cost measured in terms of remaining message units from a basic allotment of message units in a message unit allocation period, wherein the message unit conserver is operative to determine a priority of a calling party based on the list of potential callers and to determine a current message unit ration state based on a current cost of message units to the subscriber wherein the message unit conserver is operative to request a current message unit billing category associated with the subscriber from a billing system, to receive the current message unit billing category and use the current billing category to determine the current message unit ration state based on a current cost of message units to the subscriber, wherein the message unit conserver is operative to request information from a billing system regarding used message unit in a current message unit billing category from an allotment of message units in the current message unit billing category associated with the subscriber, to receive the information regarding the used message units and use the information regarding the used message unit to determine the current message unit ration state (pars. 61-62, and 71).

Claims 10-18, 21-24, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pepper in view of U.S. Patent No. 5,826,185 to Wise et al. (Wise) and further in view of Hanson US Patent Pub. No.: 20030083067

Regarding claims 10 and 30, Pepper discloses a method for managing air time, the method comprising (col.2 lines 62-67): receiving a list of potential calling parties associated with a subscriber (col.3 lines 1-3 and col. 3 lines 48-51), the list including identification information regarding the listed potential calling parties(col. 3 lines 4-6, and col. 3 lines 31-41); associating a priority level with each of the listed potential calling parties(col. 3 lines 18-30 and col. 3 lines

44-47); receiving a call request from a calling party directed at user equipment of the subscriber; determining a priority level associated with the calling party; and processing the call request according to the priority level of the calling party (abstract, figures 1,3 and 4, col.1 line 50-col. 2 line 60, col. 3 lines 6-9, col. 3 lines 12-63, and col. 5 line 1- col. 6 line 11).

However, Pepper fails to disclose the method of managing air time comprising: determining a current air time ration state associated with the subscriber; and processing the call request according to the current ration state.

In a similar field of endeavor, Wise discloses the method of managing air time comprising: determining a current air time ration state associated with the subscriber; and processing the call request according to the current ration state (see abstract, col.1 line 61- col. 2 line 10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify method of managing air time of Pepper with the teaching of Wise for the purpose of allowing, forbidding, and limiting communications access with accounts for managing usage air time.

However, Pepper as modified by Wise does not specifically address managing incoming and outgoing air time.

In analogous art, Hanson teaches managing incoming and outgoing air time (e.g., see at least paragraphs 0019).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Pepper as modified by Wise to include managing incoming and outgoing air time for the purpose of mitigating credit risk as taught by Hanson in paragraph 0015

Regarding claim 11, the combination of Pepper and Wise and Hanson discloses the method of

claim 10 wherein determining the priority level associated with the calling party comprises:
determining that the calling party is not a listed potential caller; and assigning a low priority to the calling party (Pepper, col. 3 lines 18-30).

Regarding claim 12, the combination of Pepper and Wise and Hanson discloses the method of claim 10 wherein determining the priority level associated with the calling party comprises:
determining that the calling party is a listed potential caller; and assigning the priority associated with the listed potential caller to the calling party (Pepper, see figs. 8 and 9, col. 3 lines 18-30 and col. 9 lines 12-30).

Regarding claims 13, and 14, the combination of Pepper and Wise and Hanson discloses the method of claim 10 wherein determining the priority level associated with the calling party comprises: determining a calling line identification associated with the calling party; comparing the calling line identification with the identification information of the listed potential calling parties; finding a calling line identification in the list of potential calling parties that matches the calling line identification associated with the calling party; and assigning a priority level associated with the calling line identification found in the list of potential calling parties to the calling party (Pepper, see figures 12A and 12B, col. 3 lines 18-47, col. 6 lines 12-29, col. 10 lines 47-59, and col. 11 line 51-col. 12 line 20).

Regarding claim 15, the combination of Pepper and Wise and Hanson discloses the method of claim 10 wherein determining the current air time ration state associated with the subscriber comprises: determining a remaining air time allocation period fraction associated with the subscriber; determining a remaining air time allocation fraction associated with the subscriber; determining a remaining air time allocation period to air time allocation fraction ratio associated

with the subscriber; and, determining the current air time ration state based on the air time allocation period to air time allocation fraction ratio (Wise, see figure 2c steps 402-408, figure 2f steps 501-504, col. 4 lines 26-56, and col. 5 lines 42-48).

Regarding claims 16, 18 and 21, Pepper discloses the method of claim 10 wherein processing the call according to the priority level and completing the requested call to a mobile device of the subscriber if the priority level of the calling party is high; and connecting the calling party to a message service if the priority level of the calling party is low (Pepper, col. 3 lines 24-30).

However, Pepper fails to disclose wherein determining the current air time ration state associated with the subscriber comprises: calculating the current air time ration state based on a function of remaining allocated air time in an air time allocation period and connecting the calling party to a message service if the current ration state is at a maximum restriction.

Wise et al. discloses wherein determining the current air time ration state associated with the subscriber comprises: calculating the current air time ration state based on a function of remaining allocated air time in an air time allocation period (col. 1 line 61-col. 2 line 10 and col. 3 line 15-col. 4 line 44); the current air time ration state associated with the subscriber comprises: determining a current time associated with the subscriber; determining a remaining air time allocation associated with the current time; and, determining the current air time ration state as a function of the remaining air time allocation (col. 1 line 58-col. 2 line 10, col. 3 line 15-col. 4 line 44); processing the call according to the current ration state comprises: completing the requested call to a mobile device of the subscriber if the current ration state is unrestricted and connecting the calling party to a message service if the current ration state is at a maximum restriction (col. 2 lines 10-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Pepper with the teaching of Wise et al. for the purpose of calculating and knowing allotted air time versus available air time in order to appropriately route calls to subscriber at no additional cost.

However, Pepper as modified by Wise does not specifically address managing incoming and outgoing air time.

In analogous art, Hanson teaches managing incoming and outgoing air time (e.g., see at least paragraphs 0019).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Pepper as modified by Wise to include managing incoming and outgoing air time for the purpose of mitigating credit risk as taught by Hanson in paragraph 0015. Regarding claim 17, Pepper discloses the method of claim 10. However, Pepper fails to disclose wherein determining the current air time ration state associated with the subscriber comprises: calculating the current air time ration state based on a current subscriber cost of air time.

Wise et al. discloses wherein determining the current air time ration state associated with the subscriber comprises: calculating the current air time ration state. based on a current subscriber cost (charge) of air time (see figure 2e).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Pepper with Wise et al. for the purpose of minimizing expenses for the subscriber.

However, Pepper as modified by Wise does not specifically address managing incoming and outgoing air time.

In analogous art, Hanson teaches managing incoming and outgoing air time (e.g., see at least paragraphs 0019).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Pepper as modified by Wise to include managing incoming and outgoing air time for the purpose of mitigating credit risk as taught by Hanson in paragraph 0015

Regarding claims 22-24, Pepper discloses the method of claim 10, however, Pepper fails to disclose the method wherein determining the current air time ration state associated with the subscriber comprises: requesting billing information regarding the subscriber from a billing system, requesting information regarding unused allocated air time from an allotment of air time in an air time allocation period associated with the subscriber, and requesting information regarding a current cost to the subscriber of air time.

Wise et al. discloses the method wherein determining the current air time ration state associated with the subscriber comprises: requesting billing information regarding the subscriber from a billing system (see figure 2c), requesting information regarding unused allocated air time from an allotment of air time in an air time allocation period associated with the subscriber (col. 1 line 50-col. 2 line10), and requesting information regarding a current cost to the subscriber of air time (col. 5 line 61-col. 6 line 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Pepper with the teaching of Wise et al. for the purpose of determining billing process before routing calls to the subscriber.

However, Pepper as modified by Wise does not specifically address managing incoming and outgoing air time.

In analogous art, Hanson teaches managing incoming and outgoing air time (e.g., see at least paragraphs 0019).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Pepper as modified by Wise to include managing incoming and outgoing air time for the purpose of mitigating credit risk as taught by Hanson in paragraph 0015. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pepper in view of Wise et al. as applied to claim 10 above, and further in view of U.S. Patent No. 6745025 B1 to Albert Chow (Chow) et al. and further in view of Hanson US Patent Pub. No.: 20030083067.

The combination of Pepper, and wise et al. and Hanson disclose the method of claim 18.

However, the combination fails to disclose the method wherein determining a current time comprises: determining a current day of a week, and a current time of day.

In a similar field of endeavor, Chow discloses time-of-day call forwarding in a wireless centrex services system. Chow further discloses the method wherein determining a current time comprises: determining a current day of a week, and a current time of day (col. 70 line 60-col. 71 line 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Pepper, Wise et al and Hanson with the teachings of

Chow for the purpose of only forwarding calls during the day and the time periods where they are no charges.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES SHEDRICK whose telephone number is (571)272-8621. The examiner can normally be reached on Monday thru Friday 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, V. Paul Harper can be reached on (571)-272-7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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